



STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

December 2, 1981

Mr. William B. Booth
Environmental Affairs Officer
Sunshine Mining Company
P.O. Box 1080
Kellogg, Idaho 83837

RE: Test Plots
Burgin Project
ACT/049/009
Utah County, Utah

Dear Mr. Booth:

As per your request during our November on-site meeting, the Division has prepared the following proposed test plot scheme. We will anticipate your response to this proposal at your earliest convenience.

Burgin Minesite Waste Rock and Topsoil Test Plot Scheme

Objectives:

1. To determine if methods proposed in mine plan in concert with Division recommendations will allow for adequate waste rock reclamation pursuant to variance request regarding Rule M-10.
2. To insure that topsoil stored adjacent to waste rock pile is not contaminated or degraded so as to have an adverse effect on the revegetation potential of said material.

Test Plot Locations

Applicable Treatments*

I.	Acid Waste Rock (pH=4.5)	1, 2, 3, 4
II.	Neutral Waste Rock (pH=7.5)	5, 6, 7, 8
III.	Topsoil Storage Area	5, 6, 7, 8

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*Treatments

1. Lime only, no mulch**
2. Lime and fertilizer, no mulch***
3. Lime and mulch****
4. Lime, fertilizer and mulch
5. No fertilizer and no mulch
6. Fertilizer and no mulch
7. No fertilizer and mulch
8. Fertilizer and mulch

** Lime application at the rate proposed in the mine plan. (In the mine plan no information about the size of the lime was provided. It is important to note that calcie lime reacts with the soil more quickly as does fine (30 mesh or finer) lime.

*** Fertilizer application at the rate proposed in the mine plan.

****Simulate hydromulching with 1500-2000 pounds per acre wood fiber mulch. In the final reclamation, seed, mulch and fertilizer can all be mixed together in the hydromulching process.

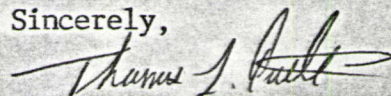
Notes

1. Plot size shall be 10' x 10' as discussed in November 25, 1981, phone conversation.
2. Species listed below as agreed upon shall be used at the following rate.

<u>Common Name</u>	<u>Scientific Name</u>	<u>lbs./acre Applied</u>
1. Crested Wheatgrass	<u>Agropyron cristoratum</u>	5.0
2. Indian Ricegrass	<u>Oryzopsis hymenoides</u>	5.0
3. Russian Wildrye	<u>Elymus junceus</u>	5.0
4. Yellow Sweetclover	<u>Melilotus officinalis</u>	5.0

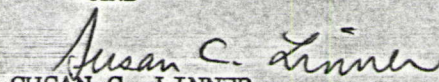
It is hoped that this proposed test plot scheme will be an aid to you in satisfying the above-mentioned objectives. If we can be of any further assistance please call either Susan Linner or Tom Portle.

Sincerely,



THOMAS L. PORTLE
RECLAMATION SOILS SPECIALIST

AND



SUSAN C. LINNER
RECLAMATION BIOLOGIST

cc: Carl Johnson